
Box _____ ***of*** _____

Packed by Thomas Batts

Document Number:

8) NPL-U4-2-12

Docket Number:

NPL-U4

NPL-U4-2-12
Adjusted Narrative,
6/88.

National Priorities List

Superfund hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) as amended in 1986

PRATT & WHITNEY AIRCRAFT/UNITED TECHNOLOGIES CORP.
West Palm Beach, Florida

Conditions at listing (October 1984): The Pratt & Whitney Aircraft/United Technologies Corp. Site comprises about 7,000 acres in West Palm Beach in north central Palm Beach County, Florida. Jet engines have been manufactured and tested on the site since 1957. Pratt & Whitney is a privately-owned Canadian-based operation and a division of United Technologies Corp.

On the site are a sanitary landfill where solvents were disposed of, a solvent storage tank that leaked approximately 2,000 gallons of trichloroethane through an underground valve, a solvent distillation area, and jet fuel heaters which contained PCBs until the mid-1970s.

Ground water and surface water are contaminated with PCBs and organic solvents, according to tests conducted by Pratt & Whitney. The company also found that the well serving its 7,200 employees is contaminated with solvents.

Pratt & Whitney has installed a forced aeration system to remove volatile organic chemicals (VOCs) from its well fields and is involved in discussions with the State regarding PCBs and landfill remedial actions.

The plant received Interim Status under Subtitle C of the Resource Conservation and Recovery Act (RCRA) when it filed Part A of a permit application. In 1983, it submitted Part B of the application.

Status (January 1986): On April 26, 1985, the company signed a Consent Agreement with the State under which the company is to implement a State-approved remedial action plan to deal with VOCs and PCBs.

Other areas of contamination, including PCB-contaminated soil and a buried leaking waste oil tank containing VOCs, have been discovered on the property.

The Pratt & Whitney facility was first proposed for the NPL as part of Update #2. In response to public comments received, EPA completely re-evaluated the site and made a significant change in its score on the Hazard Ranking System, which EPA uses to assess sites for the NPL. Consequently, EPA re-proposed the Pratt & Whitney facility on September 18, 1985 (50 FR 37950) as part of NPL Update #4 and solicited comments on the revised score.

Status (June 1988): EPA is proposing to drop Pratt & Whitney Aircraft/United Technologies Corp. from the proposed NPL. Because it is a treatment and storage facility, it is subject to the corrective action authorities of Subtitle C of RCRA.

Under the State-approved remedial action plan, Pratt & Whitney is pumping and treating contaminated ground water.

In June 1987, the State issued a 5-year RCRA permit for treatment and storage units. EPA expects to issue the corrective action portion of the permit, which the State is not yet authorized to issue later in 1988.

EPA intends to pursue cleanup under RCRA authorities and to ensure that the cleanup protects public health and the environment. Superfund enforcement authorities may also be used. EPA can later repropose the site for the NPL if it determines that the owner or operator is unable or unwilling to clean up the site effectively.

NPL-04-2-12

Hazardous waste site listed under the
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) ("Superfund")

PRATT & WHITNEY AIRCRAFT/UNITED TECHNOLOGIES CORP.
West Palm Beach, Florida

The Pratt & Whitney Aircraft/United Technologies Corp. Site comprises about 7,000 acres in West Palm Beach in north central Palm Beach County, Florida. Jet engines have been manufactured and tested on the site since 1957. Pratt & Whitney is a privately owned Canadian-based operation and a division of United Technologies Corp.

On the site are a sanitary landfill where solvents were disposed of, a solvent storage tank that leaked approximately 2,000 gallons of 1,1,1, trichloroethane through an underground valve, a solvent distilling area, and jet fuel heaters which contained PCBs until the mid-1970s.

Ground water and surface water are contaminated with PCBs and organic solvents, according to tests conducted by Pratt & Whitney. The company also found that the well serving its 7,200 employees is contaminated with solvents.

Pratt & Whitney has installed a forced aeration system to remove volatile organic chemicals (VOCs) from its well fields. On April 26, 1985, the company signed a consent agreement with the State under which the company is to implement a State-approved remedial action plan to deal with VOCs and PCBs.

Other areas of contamination, including a buried leaking waste oil tank containing VOCs and PCB-contaminated soil, have been discovered on the property.

The Pratt & Whitney facility was first proposed for the NPL on October 15, 1984, as part of Update #2. In response to public comments received, EPA completely reevaluated the site and has made a significant change in its score on the Hazard Ranking System, which EPA uses to assess waste sites for the NPL. Consequently, EPA has determined that the most appropriate action is to repropose the Pratt & Whitney facility in NPL Update #4 and solicit comments on the revised score.

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NPL-04-2-12

Facility name: Pratt & Whitney Aircraft JUNI 20 TECH.

Location: West Palm Beach Florida

EPA Region: IV

Person(s) in charge of the facility: James L. Seilinger, mgr utilities
operations / Environmental Affairs
West Palm Beach, FL 33402

Name of Reviewer: Zoe Kulakowski Date: June 29, 1984

General description of the facility:
 (For example: landfill, surface impoundment, pile, container; types of hazardous substances; location of the facility; contamination route of major concern; types of information needed for rating; agency action, etc.)

The facility encompasses approximately 7000 acres
in north central Palm Beach County & includes a san-
itary landfill where solvents have been disposed of by
open-burning & possibly without burning, a solvent
storage tank and a solvent distilling area. Groundwater
contamination has been confirmed

Scores: $S_M =$ ($S_{gw} = 55.26$ $S_{sw} = 6.71$ $S_a = 0$) 32.18

$S_{FE} =$

$S_{DC} =$

FIGURE 1
HRS COVER SHEET

QA 5/22/85
Kathleen E. Halloray

Ground Water Route Work Sheet						
Rating Factor	Assigned Value (Circle One)		Multi- plier	Score	Max. Score	Ref. (Section)
1 Observed Release	0	45	1	45	45	3.1
If observed release is given a score of 45, proceed to line 4 . If observed release is given a score of 0, proceed to line 2 .						
2 Route Characteristics						3.2
Depth to Aquifer of Concern	0	1	2	3	2	6
Net Precipitation	0	1	2	3	1	3
Permeability of the Unsaturated Zone	0	1	2	3	1	3
Physical State	0	1	2	3	1	3
Total Route Characteristics Score						15
3 Containment	0	1	2	3	1	3
4 Waste Characteristics						3.4
Toxicity/Persistence	0	3	6	9	12	15
Hazardous Waste Quantity	0	1	2	3	4	5
	6	7	8	1	1	8
Total Waste Characteristics Score					16	26
5 Targets						3.5
Ground Water Use	0	1	2	3	3	9
Distance to Nearest Well/Population Served	0	4	6	8	10	1
	12	16	18	20	24	35
	30	32	35	40		
Total Targets Score					44	49
6 If line 1 is 45, multiply 1 x 4 x 5						
If line 1 is 0, multiply 2 x 3 x 4 x 5						
					31680	57,330
7 Divide line 6 by 57,330 and multiply by 100	S _{gw} = 55.26					

**FIGURE 2
GROUND WATER ROUTE WORK SHEET**

QA 5/22/85
Kathleen Hallway

Surface Water Route Work Sheet						
Rating Factor	Assigned Value (Circle One)	Multi-plier	Score	Max. Score	Ref. (Section)	
1 Observed Release	0 45	1	0	45	4.1	
If observed release is given a value of 45, proceed to line 4 . If observed release is given a value of 0, proceed to line 2 .						
2 Route Characteristics					4.2	
Facility Slope and Intervening Terrain	0 1 2 3	1	3	3		
1-yr. 24-hr. Rainfall	0 1 2 3	1	3	3		
Distance to Nearest Surface Water	0 1 2 3	2	6	6		
Physical State	0 1 2 3	1	3	3		
Total Route Characteristics Score			15	15		
3 Containment	0 1 2 3	1	3	3	4.3	
4 Waste Characteristics					4.4	
Toxicity/Persistence	0 3 6 9 12 15 18	1	15	18		
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 8	1	1	8		
Total Waste Characteristics Score			16	26		
5 Targets					4.5	
Surface Water Use	0 1 2 3	3	0	9		
Distance to a Sensitive Environment	0 1 2 3	2	6	6		
Population Served/Distance to Water Intake Downstream	0 4 6 8 10 12 16 18 20 24 30 32 35 40	1	0	40		
Total Targets Score			6	55		
6 If line 1 is 45, multiply 1 x 4 x 5 If line 1 is 0, multiply 2 x 3 x 4 x 5			4320	64,350		
7 Divide line 6 by 64,350 and multiply by 100			$S_{SW} = 6.71$			

FIGURE 7
SURFACE WATER ROUTE WORK SHEET

QA 7/10/85
Kathleen Gallagher

Air Route Work Sheet						
Rating Factor	Assigned Value (Circle One)	Multi- plier	Score	Max. Score	Ref. (Section)	
1 Observed Release	0 45	1		45	5.1	
Date and Location:						
Sampling Protocol:						
If line 1 is 0, the $S_a = 0$. Enter on line 5 . If line 1 is 45, then proceed to line 2 .						
2 Waste Characteristics					5.2	
Reactivity and Incompatibility	0 1 2 3	1		3		
Toxicity	0 1 2 3	3		9		
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 8	1		8		
Total Waste Characteristics Score				20		
3 Targets					5.3	
Population Within 4-Mile Radius	0 9 12 15 18 21 24 27 30	1		30		
Distance to Sensitive Environment	0 1 2 3	2		6		
Land Use	0 1 2 3	1		3		
Total Targets Score				39		
4 Multiply 1 x 2 x 3				35,100		
5 Divide line 4 by 35,100 and multiply by 100			$S_a = 0$			

FIGURE 9
AIR ROUTE WORK SHEET

QA 5/22/85
Kutler & Hallway

	s	s ²
Groundwater Route Score (S _{gw})	55.26	3053.67
Surface Water Route Score (S _{sw})	6.71	45.02
Air Route Score (S _a)	0	0
$S_{gw}^2 + S_{sw}^2 + S_a^2$		3098.69
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2}$		55.67
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2} / 1.73 = S_M =$		32.18

FIGURE 10
WORKSHEET FOR COMPUTING S_M

QA
2/10/85
LCH

Fire and Explosion Work Sheet						
Rating Factor	Assigned Value (Circle One)		Multi- plier	Score	Max. Score	Ref. (Section)
1 Containment	1	3	1		3	7.1
2 Waste Characteristics						7.2
Direct Evidence	0	3	1		3	
Ignitability	0	1 2 3	1		3	
Reactivity	0	1 2 3	1		3	
Incompatibility	0	1 2 3	1		3	
Hazardous Waste Quantity	0	1 2 3 4 5 6 7 8	1		8	
Total Waste Characteristics Score					20	
3 Targets						7.3
Distance to Nearest Population	0	1 2 3 4 5	1		5	
Distance to Nearest Building	0	1 2 3	1		3	
Distance to Sensitive Environment	0	1 2 3	1		3	
Land Use	0	1 2 3	1		3	
Population Within 2-Mile Radius	0	1 2 3 4 5	1		5	
Buildings Within 2-Mile Radius	0	1 2 3 4 5	1		5	
Total Targets Score					24	
4 Multiply 1 x 2 x 3					1,440	
5 Divide line 4 by 1,440 and multiply by 100				SFE =		

**FIGURE 11
FIRE AND EXPLOSION WORK SHEET**

QA 5/22/85
Kathleen E. Hallway

Direct Contact Work Sheet						
Rating Factor	Assigned Value (Circle One)		Multi- plier	Score	Max. Score	Ref. (Section)
1 Observed Incident	0	45	1		45	8.1
If line 1 is 45, proceed to line 4 If line 1 is 0, proceed to line 2						
2 Accessibility	0	1 2 3	1		3	8.2
3 Containment	0	15	1		15	8.3
4 Waste Characteristics Toxicity	0	1 2 3	5		15	8.4
5 Targets						8.5
Population Within a 1-Mile Radius	0	1 2 3 4 5	4		20	
Distance to a Critical Habitat	0	1 2 3	4		12	
Total Targets Score					32	
6 If line 1 is 45, multiply 1 x 4 x 5 If line 1 is 0, multiply 2 x 3 x 4 x 5					21,600	
7 Divide line 6 by 21,600 and multiply by 100				SDC =		

**FIGURE 12
DIRECT CONTACT WORK SHEET**

OA 5/22/85
Kathleen Hallary

DOCUMENTATION RECORDS
FOR
HAZARD RANKING SYSTEM

INSTRUCTIONS: As briefly as possible summarize the information you used to assign the score for each factor (e.g., "Waste quantity = 4,230 drums plus 800 cubic yards of sludges"). The source of information should be provided for each entry and should be a bibliographic-type reference. Include the location of the document.

FACILITY NAME: Pratt & Whitney Aircraft

LOCATION: West Palm Beach, Florida

DATE SCORED: June 29, 1984

PERSON SCORING: Zoe Kulakowski

PRIMARY SOURCE(S) OF INFORMATION (e.g., EPA region, state, FIT, etc.):

FACTORS NOT SCORED DUE TO INSUFFICIENT INFORMATION:

COMMENTS OR QUALIFICATIONS:

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Facility Name: Pratt and Whitney Aircraft

Location: West Palm Beach, Florida

EPA Region: IV

Person(s) in Charge of the Facility: James L. Seilinger, Manager
Utilities Operations/
Environmental Affairs
West Palm Beach, FL 33402

Name of Reviewer: Zoe Kulakowski Date: June 29, 1984

General Description of the Facility:

The facility encompasses approximately 7000 acres in north central Palm Beach County and includes a sanitary landfill where solvents have been disposed of by open-burning and possibly without burning, a solvent storage tank which leaked approximately 2000 gallons of trichloroethane through an underground valve, a solvent distilling area, and jet fuel heaters that contained PCB heat exchange fluid until the mid 70's. Ground water and surface water contamination has been confirmed.

$$\begin{array}{r} 32.18 \\ 32.12 \\ 55.30 \end{array} \quad \begin{array}{r} 55.26 \\ 55.30 \end{array} \quad \begin{array}{r} 6.71 \\ 5.37 \end{array}$$
 Scores: $S_M = 47.25$ ($S_{GW} = 79.49$ $S_{SW} = 19.30$ $S_A = 0$)

SFE = Not rated

SDC = Not rated

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5/22/85
Kathleen Haller

PART

Ground Water Route

1 OBSERVED RELEASE

Contaminants detected (5 maximum):

1,1,1-trichloroethane
trichloroethylene
tetrachloroethylene
~~Polychlorinated biphenyls~~
chloroform

vinyl chloride

Source: Dames & Moore reports dated 5-14-81, ^{*sampling results Well #1*} ~~6-24-83, and 6-28-83.~~

^{*p.4*}
Dames & Moore report 5-14-81, Plate 14; 6-28-83, p. Table III b (Background)
Rationale for attributing the contaminants to the facility:

~~Chemicals have been or are being used on site. Also, monitoring has shown contaminant plume encroachment on site water supply wells.~~

Contaminants detected in drinking water wells on the facility have all been or are being used on the site at a facility in an area which was not contained. References: No. 3, p. 4; sampling results Well #1

2 ROUTE CHARACTERISTICS

Depth to Aquifer of Concern

Name/description of aquifer(s) of concern:

Depth(s) from the ground surface to the highest seasonal level of the saturated zone [water table(s)] of the aquifer of concern:

Depth from the ground surface to the lowest point of waste disposal/storage:

*QA 5/22/85
K. J. Halloran*

3 CONTAINMENT

Containment

Method(s) of waste or leachate containment evaluated:

Method with highest score:

4 WASTE CHARACTERISTICS

Toxicity and Persistence

Compound(s) evaluated:

vinyl chloride

- or 1,1,1-trichloroethane 2/2
- trichloroethylene 2/2
- tetrachloroethylene 3/2 (perchloroethylene)
- chloroform 3/3

Source: Sax and User's Manual

Compound with highest score:

~~Chloroform (Score of 18)~~

Vinyl chloride (Score of 15)

Source: Users Manual

Hazardous Waste Quantity

Total quantity of hazardous substances at the facility, excluding those with a containment score of 0 (Give a reasonable estimate even if quantity is above maximum):

- ~2000 gallons of 1,1,1-trichloroethane lost via leaking underground valve.
- ~~~53,500 gallons of jet fuel with high PCB content on water table from leaks and spills.~~
- ?Sanitary landfill - Solvent open-burning & possible drum burial.
- ?Solvent still area - spent solvent reclamation area with leakage & spillage highly probable.

Sources: Dames and Moore report dated 5/14/81 ^{pp. 4-5} and ~~Weston, Inc. RAP dated 3/7/84.~~

*QA 5/22/85
K. Ballou*

Basis of estimating and/or computing waste quantity:

40

$$\frac{53,500 \text{ gal of PCB jet fuel} + 2000 \text{ gal of trichloroethane}}{50 \text{ gal per drum}} = \frac{1,100}{40} \text{ drums}$$

Net Precipitation

Mean annual or seasonal precipitation (list months for seasonal);

Mean annual lake or seasonal evaporation (list months for seasonal):

Net precipitation (subtract the above figures):

Permeability of Unsaturated Zone

Soil type in unsaturated zone:

Permeability associated with soil type:

Physical State

Physical state of substances at time of disposal (or at present time for generated gases);

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K. Halloway

5 TARGETS

Ground Water Use

Use(s) of aquifer(s) of concern within a 3-mile radius of the facility:

Sole source of drinking water for employees.

Source: Dames and Moore report dated 5/14/81.

Distance to Nearest Well

Location of nearest well drawing from aquifer of concern or occupied building not served by a public water supply:

This site has a well field of 8 wells which supply drinking water for the company's ~7200 employees.

Sources: Dames and Moore 5/14/81 report and NIOSH's 4/82 report; *Reference #4 p. 7*

Distance to above well or building:

Zero (two wells have been removed from service due to ground water contamination.)

Source: Dames and Moore reports dated 5/14/81, 6/28/83; *References 7, 9.*

Population Served by Ground Water Wells Within a 3-Mile Radius

Identified water-supply well(s) drawing from aquifer(s) of concern within a 3-mile radius and populations served by each:

Pratt & Whitney Aircraft - 8 water supply wells served the ~7200 employees. No municipal supplies available. The surficial aquifer supplies all drinking and irrigation water.

Computation of land area irrigated by supply well(s) drawing from aquifer(s) of concern within a 3-mile radius, and conversion to population (1.5 people per acre):

No data

Total population served by ground water within a 3-mile radius:

~7200 people

References: #3, p. 7; #9

*QA 5/22/85
K. A. Adair*

SURFACE WATER ROUTE

1 OBSERVED RELEASE

Contaminants detected in surface water at the facility or downhill from it (5 maximum):

None

Rationale for attributing the contaminants to the facility:

2 ROUTE CHARACTERISTICS

Facility Slope and Intervening Terrain

Average slope of facility in percent:

Solvent Spill Area : 0.125%

Landfill : 33.3%

Polishing Pond: .066% Ref 10

Name/description of nearest downslope surface water:

There is an on-site canal, however, there is no documented migration route into the canal. Therefore, the nearest surface water are the numerous unnamed wetlands.

Ref 8, 10

Average slope of terrain between facility and above-cited surface water body in percent:

< 1% for all areas

Ref 8, 10

Is the facility located either totally or partially in surface water?

Yes, seasonal highs of the water table put both the pond and landfill in surface water.

Ref 11

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XEM

Is the facility completely surrounded by areas of higher elevation?

No

1-Year 24-Hour Rainfall in Inches

4.5 inches

HRS Users Manual

Distance to Nearest Downslope Surface Water

Distance to nearest wetlands is < 100 ft.

Refr 8

Physical State of Waste

Liquids were disposed of in all three areas

Refr 3, 4, 5,

3 CONTAINMENT

Containment

Method(s) of waste or leachate containment evaluated:

Solvent Still Area: no containment (3)

Landfill: cover is inadequate and there is no leachate collection system (2)

Polishing Pond: diking has collapsed in past (3) Refr 10

Method with highest score:

Solvent Still Area } 3
Polishing Pond }

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KCA

4 WASTE CHARACTERISTICS

Toxicity and Persistence

Compound(s) evaluated

1,1,1-trichloroethane 2 1/2 tetrachloroethylene 3 1/2
 trichloroethylene 2 1/2 vinyl chloride 15

Ref 3

Compound with highest score:

vinyl chloride 15

Users ManualHazardous Waste Quantity

Total quantity of hazardous substances at the facility, excluding those with a containment score of 0 (Give a reasonable estimate even if quantity is above maximum):

The quantity of waste available to the surface water migration route is unknown.

Ref 3: pp 4-5.

Basis of estimating and/or computing waste quantity:

Unknown quantity score = 1

HRS Users Manual ***

5 TARGETS

Surface Water Use

Use(s) of surface water within 3 miles downstream of the hazardous substance:

documented
 Not use of wetlands.

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Is there tidal influence?

No

Distance to a Sensitive Environment

Distance to 5-acre (minimum) coastal wetland, if 2 miles or less:

N/A

Distance to 5-acre (minimum) fresh-water wetland, if 1 mile or less:

Zero - 100 feet - herbaceous and forested wetlands are located adjacent to the polishing pond and landfill.

Ref 8

Distance to critical habitat of an endangered species or national wildlife refuge, if 1 mile or less:

None located w/i 3 miles

Population Served by Surface Water

Location(s) of water-supply intake(s) within 3 miles (free-flowing bodies) or 1 mile (static water bodies) downstream of the hazardous substance and population served by each intake:

No data

*QA
7/10/85
KEA*

Computation of land area irrigated by above-cited intake(s) and conversion to population (1.5 people per acre):

N/A

Total population served:

N/A

Name/description of nearest of above water bodies:

N/A

Distance to above-cited intakes, measured in stream miles.

N/A

AIR ROUTE

1 OBSERVED RELEASE

Contaminants detected:

No data

Date and location of detection of contaminants

Methods used to detect the contaminants:

Rationale for attributing the contaminants to the site:

2 WASTE CHARACTERISTICS

Reactivity and Incompatibility

Most reactive compound:

Most incompatible pair of compounds:

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K. D. Hall

Toxicity

Most toxic compound:

Hazardous Waste Quantity

Total quantity of hazardous waste:

Basis of estimating and/or computing waste quantity:

3 TARGETS

Population Within 4-Mile Radius

Circle radius used, give population, and indicate how determined:

0 to 4 mi

0 to 1 mi

0 to 1/2 mi

0 to 1/4 mi

Distance to a Sensitive Environment

Distance to 5-acre (minimum coastal wetland, if 2 miles or less:

Distance to 5-acre (minimum) fresh-water wetland, if 1 mile or less:

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K. Gallaway

Distance to critical habitat of an endangered species, if 1 mile or less:

Land Use

Distance to commercial/industrial area, if 1 mile or less:

Distance to national or state park, forest, or wildlife reserve, if 2 miles or less:

Distance to residential area, if 2 miles or less:

Distance to agricultural land in production within past 5 years, if 1 mile or less:

Distance to prime agricultural land in production within 5 years, if 2 miles or less:

Is a historic or landmark site (National Register or Historic Places and National Natural Landmarks) within the view of the site?

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K. Ballou

REFERENCES

If the entire reference is not available for public review in the EPA regional files on this site, indicate where the reference may be found:

Reference Number	Description of the Reference
1	Uncontrolled Hazardous Waste Site Ranking System; A Users Manual. National Oil and Hazardous Substances Contingency Plan, Appendix A (40 CFR 300)(47 FR 31219), July 16, 1982.
2	Sax. 1979. Dangerous Properties of Industrial Materials. Fifth edition.
3	Dames & Moore. May 14, 1981. Report: Groundwater Contamination Study. Water Supply Wellfield Palm Beach County, Florida for Pratt & Whitney. # 12038-002-26.
4	Dames & Moore. June 28, 1983. Report: Landfill Assessment Pratt & Whitney Plant Site West Palm Beach County, Florida for Pratt & Whitney Aircraft. # 12038-010-26.
5	Dames & Moore. June 24, 1983. Assessment and General Remediation Plan PCB Contamination Pratt & Whitney Plant Site Palm Beach County, Florida. # 12038-011-26.
6	Boy F. Western Inc., Post, Buckley, Schuh, & Jernigan, Inc. March 7, 1984. United Technologies Pratt & Whitney Aircraft Government Products Division Remedial Action Plan for PCB Contamination
7	U.S. Department of Health and Human Services, Centers for Disease Control, National Institute for Occupational Safety and Health. April 1982. Interim Report No. 1 Pratt & Whitney Aircraft West Palm Beach, Florida. HETA 82-075.
8	U.S.G.S. West Palm Beach 2 NE quadrangle map.
9	Telecom. August 29, 1984. Zoe Kulatowski, State of Florida, Department of Environmental Regulation and Joe Luvix, Environmental Specialist, DER.

References, cont'd.

10. Correspondence from Richard R. Reis, Enforcement Section
Head, Florida DER, July 1, 1985.

11. Telecon. 22 May 1985 Richard R. Reis, Enforcement Sect.
Head, Florida, DER.